AMENDMENTS TO THE CLAIMS:

Please amend 72, 82, 86, 90, 95, and 98. This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1.-71. (Cancelled)

72. (Currently Amended) A method for creating structures [[in]] on an electrically conductive surface of a substrate, comprising:

providing a master electrode for receiving soluble anode material, the master electrode having an electrically conductive surface less soluble than the soluble anode material, and an insulating pattern layer arranged directly on the less soluble surface, the insulating pattern layer cooperating with the less soluble surface to define at least one cavity substantially devoid of soluble anode material;

depositing a quantity of soluble anode material on the less soluble surface of the cavity, wherein the arranging of the insulating pattern layer directly on the less soluble surface prevents soluble anode material from being disposed between the less soluble surface and the insulating pattern layer;

bringing the master electrode in close contact with the electrically conductive surface of the substrate; and

~~wherein depositing includes at least one of~~

~~(a) supplying a quantity of soluble anode material onto the less soluble surface of the cavity and thereafter~~ plating [[a]] at least one

pattern structure on the substrate by electrochemically transporting, through an electrolyte solution, the soluble anode material ~~deposited in~~ from the cavity to the electrically conductive surface of the substrate, wherein the insulating pattern layer is arranged directly on the less soluble surface in a manner substantially preventing undercutting of the insulating pattern layer during plating~~; and~~

~~(b) etching a pattern on the substrate by electrochemically transporting, through an electrolyte solution, soluble anode material from the electrically conductive surface of the substrate~~.

73. (Previously Presented) The method according to claim 72, wherein the electrically conductive surface of the master electrode is chemically inert with respect to the electrolyte solution used.

74. (Previously Presented) The method according to claim 72, further including supplying an external plating voltage in such way that the electrically conductive surface of the substrate becomes a cathode and the master electrode becomes an anode in local electrochemical plating cells, the plating cells being defined by the at least one cavity.

75. (Previously Presented) The method according to claim 73, further including supplying an external plating voltage in such way that the electrically conductive surface of the substrate becomes a cathode and the master electrode becomes an anode in local electrochemical plating cells, the plating cells being defined by the at least one cavity.

76. (Previously Presented) The method according to claim 72, wherein the anode material is deposited in the cavity with electrochemical deposition, using an electrochemical cell, the electrochemical cell being defined by the cavity.

77. (Previously Presented) The method according to claim 72, further including applying an external etching voltage in such way that the electrically conductive surface of the substrate becomes an anode and the master electrode becomes a cathode in a local electrochemical etching cell, the cell being defined by the cavity.

78. (Previously Presented) The method according to claim 73, further including applying an external etching voltage in such way that the electrically conductive surface of the substrate becomes an anode and the master electrode becomes a cathode in a local electrochemical etching cell, the cell being defined by the cavity.

79. (Previously Presented) The method according to claim 72, wherein residual material deposited in the cavity is removed in a subsequent cleaning process.

80. (Previously Presented) The method according to claim 79, wherein the cleaning process includes electrochemical etching of the material deposited in the cavity using either a conventional electrochemical etching cell or local electro chemical cell, the cell being defined by the cavity.

81. (Previously Presented) The method according to claim 72, wherein the electrically conductive surfaces of the master electrode and the substrate comprises an electrically conductive material.

82. (Currently Amended) The method according to claim 81, wherein at least one of the electrically conductive surfaces of the master electrode and the substrate is chosen from the group comprising stainless steel, platinum, palladium, gold, nickel, titanium, aluminum, and chromium, ~~and alloys,~~ wherein the group further comprises copper as an electrically conductive surface of the substrate.

83. (Previously Presented) The method according to claim 72, wherein a semiconductor structure is formed on the electrically conductive surface of the substrate.

84. (Previously Presented) The method according to claim 72, wherein a conductive polymer structure is formed on the electrically conductive surface of the substrate.

85. (Previously Presented) The method according to claim 72, further including using applying a pulsed voltage applied between the master electrode and the substrate.

86. (Currently Amended) The method according to claim 85, wherein a frequency of the pulsed voltage is in a range of about 2 to about 20 kHz.

87. (Previously Presented) The method according to claim 85, wherein a frequency of the pulsed voltage is about 5 kHz.

88. (Previously Presented) The method according to claim 85, wherein the pulsed voltage is a periodic pulse reverse voltage.

89. (Previously Presented) The method according to claim 85, wherein the pulsed voltage has complex waveforms.

90. (Currently Amended) The method according to claim 72, wherein the electrolyte solution includes at least one of a concentration of electro-active ions of about 10 mM to about 1200 mM in the electrolyte solution and a sequestering agent.

91. (Previously Presented) The method according to claim 90, wherein the sequestering agent is EDTA.

92. (Previously Presented) The method according to claim 72, wherein an additive system is used in the electrolyte solution, the additive system comprising at least one of wetting agents, accelerators, suppressors, and levelers.

93. (Previously Presented) The method according to claim 72, wherein the electrolyte solution has little or no supporting electrolyte and at least one of a high concentration of electro-active species and no chemical oxidation agent.

94. (Previously Presented) The method according to claim 72, wherein counter ions in the electrolyte solution are exchanged to ones which provide higher solubility.

95. (Currently Amended) The method according to claim 72, wherein the electrolyte solution comprises acid copper and the electrolyte solution has a pH value ~~between~~ of from about 2 [[and]] to about 5.

96. (Previously Presented) The method according to claim 93, wherein the electrolyte solution is an optimized electrolyte in a local etching cell or a local plating cell.

97. (Previously Presented) The method of claim 72 further comprising successively plating a pattern on multiple electrically conductive substrates, and wherein the method includes substantially emptying the cavity of soluble anode material between plating of successive substrates.

98. (Currently Amended) A method for creating structures [[in]] on an electrically conductive surface of a substrate, comprising:

providing a master electrode for receiving soluble anode material, the master electrode having an electrically conductive surface less soluble than the soluble anode material and an insulating pattern layer arranged directly on the less soluble surface, the insulating pattern layer cooperating with the less soluble surface to define at least one cavity substantially devoid of soluble anode material;

depositing a quantity of soluble anode material on a surface in the cavity less soluble than the anode material, wherein the arranging of the insulating pattern layer directly on the less soluble surface of the master electrode prevents soluble anode material from being disposed between the less soluble surface and the insulating pattern layer;

bringing the master electrode in close contact with the electrically conductive surface of the substrate; and

~~wherein depositing includes at least one of~~

~~(a) supplying a quantity of soluble anode material onto the surface in the cavity less soluble than the anode material and thereafter~~ plating [[a]] at least one pattern structure on the substrate by

electrochemically transporting, through an electrolyte solution, the soluble anode material ~~deposited in~~ from the cavity to the electrically conductive surface of the substrate, wherein the insulating pattern layer is arranged directly on the less soluble surface in a manner substantially preventing undercutting of the insulating pattern layer during plating~~; and~~

~~(b) etching a pattern on the substrate by electrochemically transporting, through an electrolyte solution, soluble anode material from the electrically conductive surface of the substrate~~.

99. (Previously Presented) The method of claim 98 further comprising successively plating a pattern on multiple electrically conductive substrates, and wherein the method includes substantially emptying the cavity of soluble anode material between plating of successive substrates.